

## A new species of *Cheilotrichia* (*Empeda*) from the Sakhalin amber (*Diptera*, *Limoniidae*)

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Abstract. *Cheilotrichia* (*Empeda*) *palaeocenica*, sp. n., from the palaeocene amber of Sakhalin is described and illustrated. This is the oldest representative of the genus.

Key words: Palaeocene, Sakhalin, amber, fossil, *Cheilotrichia*, *Limoniidae*, *Diptera*.

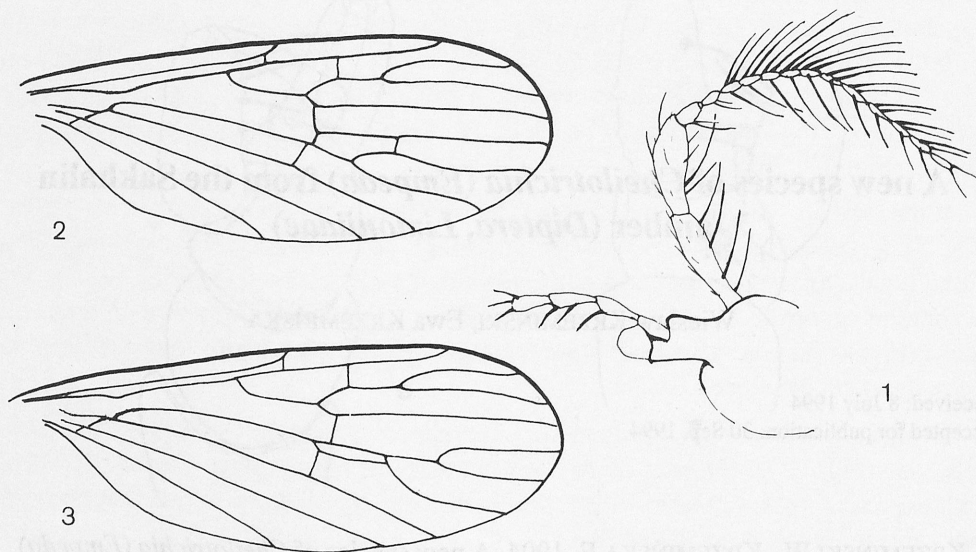
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### INTRODUCTION

The genus *Cheilotrichia* EDWARDS comprises ca. 100 Recent species, distributed over all continents, except for Antarctica. It consists of two subgenera, *Cheilotrichia* EDW. s. str. and *Empeda* OSTEN-SACKEN; the latter comprising over 80 Recent species.

The first fossil species was described by MEUNIER (1899) from the Baltic amber (Upper Eocene). ALEXANDER (1931) found in Baltic amber further 8 species, all belonging the subgenus *Cheilotrichia* (*Empeda*). Two species of this subgenus were described from Isle of Wight (Oligocene) by COCKERELL (1921). The species described below comes from Sakhalin amber (Far East Russia).

The Sakhalin amber has been collected in Starodubskoe at seashore, so its age is not exactly known; according to ZHERYKHIN (1978) its fauna seems to be more ancient than that of the Baltic amber (supposedly Palaeocene). In 1991 amber was also discovered in coal-bearing deposits of Nizhnaya Duika Formation (Palaeocene) on the Naiba River; it is similar with, and probably identical to, the resins from Starodubskoe which come probably from the same source. (V. V. ZHERYKHIN, personal comm.).



Figs 1-3. *Cheilotrichia (Empeda) palaeocenica* sp. n.: 1 – head with palpus and antennae; 2, 3 – wing venation of paratype (2) and holotype (3) with abnormal *d* cell.

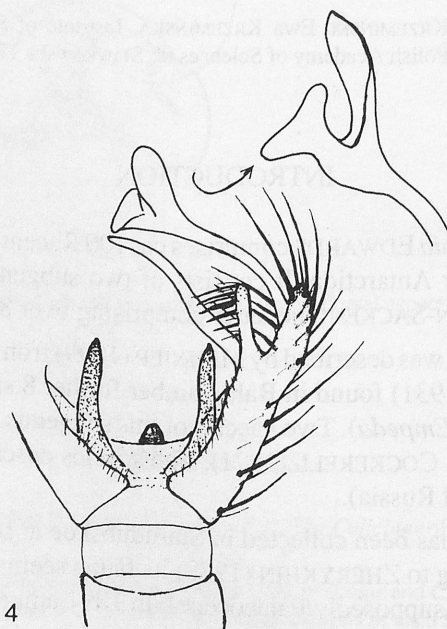


Fig. 4. *Cheilotrichia (Empeda) palaeocenica* sp. n., male genitalia ventrally and dististylus ventrolaterally.

*Cheilotrichia (Empeda) palaeocenica* sp. n.

**D i a g n o s i s .** Outer dististylus long, narrow, apically forked into two processes, of which the lower is widened shovel-like; inner dististylus long, narrow, slightly S-curved.

**D e s c r i p t i o n .** Wing 2 mm long; veins and margin set with long, dense trichiae. Body ca. 3 mm long. Head small, palpi as long as head without rostrum, palpomeres almost of equal length. Antennae: scape and pedicel long and slightly widened distally; 13 flagellomeres present, of which two basal ones devoided of bristles; each of the remaining ones with 3 long bristles, several times longer than the segments which bear them (Fig. 1).

Wing (Figs 2, 3): *Sc* short, ending opposite midlength of *Rs*; cross-vein *sc-r* at end of *Sc*; *Rs* almost equal *R3+4*; cross-vein *r-r* (*R2*) almost in the midlength of *R3+4*; *d* cell in both wings of the holotype abnormally shaped (Fig. 3), while in the paratype it is narrow and elongated (Fig. 2); cross-vein *m-cu* just before fork of *Mb*; fork of *M3+4* in the proximal half of *d* cell.

Male terminalia: outer dististylus long, narrow, apically divided into two widened processes (Fig. 4); the inner is single, long and narrow, slightly S-curved. Between the dististyli a long, narrow process of the basistylus is present, with long, thick bristles.

**M a t e r i a l e x a m i n e d .** H o l o t y p e No. 3387/1; P a r a t y p e No. 3387/2, Sakhalin (Russia), Paleocene. Housed in the Paleontological Institute, Moscow, Russia.

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